

### **Listing of Claims:**

1. (Currently Amended) A method of automatically controlling fraud in an electronic transaction system, comprising the steps of:

generating an element and storing the generated element in a database in association with information identifying a session initiated by a user when the user initiates the session in the electronic transaction system;

each time during the session that the user commands the execution of an operation, determining an equation that is satisfied by the element stored in the database;

solving a system of independent equations comprising the determined equations to ~~deduce the~~ obtain an element therefrom when a number of the determined equations is greater than a number of authorized operations, the obtained element being equal to the generated element stored in the database; and

deducing from the obtained element, by consulting the database, the associated information identifying the user that initiated the session.

2. (Canceled)

3. (Previously Presented) The method according to claim 1, wherein the independent equations are linear equations.

4. (Previously Presented) The method according to claim 1, wherein the element comprises a series of numerical coefficients.

5. (Previously Presented) The method according to claim 4, wherein the series of numerical coefficients defines an equation of a hyperplane having (n-1) dimensions in a space having n dimensions and, when the user commands the execution of ~~an~~ the operation, the step of determining the equation comprises determining coordinates  $(X_i^1, X_i^2, \dots, X_i^n)$  of a point in the hyperplane having (n-1) dimensions in the space having n dimensions.

6. (Previously Presented) The method according to claim 5, wherein the series of numerical coefficients defines an equation of a line in a space having two dimensions and, when the user commands the execution of the operation, the step of determining the equation comprises determining coordinates  $(X_i, Y_i)$  which belong to the line.

7. (Previously Presented) The method according to claim 4, wherein the series of numerical coefficients defines coordinates  $(X_1, X_2, \dots, X_n)$  of a point in a space having n dimensions and, when the user commands the execution of ~~an~~ the operation, the step of determining the equation comprises determining the equation of a hyperplane containing the point in the space having n dimensions.

8. (Previously Presented) The method according to claim 7, wherein the series of numerical coefficients defines coordinates  $(X_1, X_2)$  of a point in a space having two dimensions and, when the user commands the execution of the operation, the step of determining the equation further comprises determining an equation of a line  $(D_i)$  passing through the point in the space having two dimensions.

9. (Currently Amended) A system for automatically controlling fraud in an electronic transaction system, comprising:

first calculation means for generating an element when a user initiates a session in the electronic transaction system;

a database in which the generated element is stored in association with information identifying the session initiated by a user, the first calculation means being configured to define, each time that the user commands execution of an operation during the session, an equation that is satisfied by the element stored in the database; ~~and~~

second calculation means configured to solve a system of independent equations comprising the equations defined by the first calculation means to ~~deduce the~~ obtain an element therefrom when a number of the defined equations is greater than a number of authorized operations, the obtained element being equal to the generated element stored in the database, so that, by consulting the database, it is possible to deduce from the obtained element ~~obtained~~ the associated information which identifies the user that initiated the session; and

a control module comprising a processor and memory and being configured to connect to a server of the electronic transaction system to receive the generated element and store the generated element in the database.

10. (Currently Amended) A non-transitory computer-readable storage medium encoded with a computer program executed by a computer that causes automatic control of fraud in an electronic transaction system, the computer program comprising:

program-code for generating an element and storing the generated element in a database in association with information identifying a session initiated by a user when the user initiates the session in the electronic transaction system;

program-code for defining, each time during the session that the user commands execution of an operation, an equation that is satisfied by the element stored in the database;

program-code for solving a system of independent equations comprising the defined equations to ~~deduce the~~ obtain an element therefrom when a number of the defined equations is greater than a number of authorized operations, the obtained element being equal to the generated element stored in the database; and

program-code for deducing from the obtained element, by consulting the database, the associated information identifying the user that initiated the session.

11. (Previously Presented) The method according to claim 1, wherein the element is dependent on the number of authorized operations for the user during the session.